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OCCUPATIONAL INJURIES AND DISEASES IN ALBERTA

Lost-Time Claims and Claim Rates

Manufacturing, Processing & Packaging Industries

2001 to 2005

Released July 2006

WORK SAFE ALBERTA

Alberta
Human Resources
and Employment

Building
Alberta's
Workforce

TABLE OF CONTENTS

Highlights ii

1. Introduction 1

2. Lost-Time Claim Rate and Duration Rate 3
  2.1 Lost-Time Claim Rate by Size of Employer 5
  2.2 Lost-Time Claims by Manufacturing, Processing and Packaging Sub-Sector 6

3. Injury and Disease Analysis 13
  3.1 Injured Worker Characteristics 13
  3.2 Nature of Injury or Disease 15
  3.3 Part of Body Injured 17
  3.4 Source of Injury or Disease 19
  3.5 Type of Event or Exposure 21
  3.6 Duration of Disability 24

4. Occupational Fatalities 26

5. Certificate of Recognition Employers 30

Appendix A: Terms, Definitions and Formulas 32

Appendix B: Manufacturing, Processing and Packaging WCB Industry Codes 35

Contact Information 38

HIGHLIGHTS

From 2001 to 2005...

- There were 34,138 lost-time claims from workers in the Manufacturing, Processing and Packaging industries. Of those, 35.9% involved Primary Metal (especially steel) Products, 16.4% Wood Products, and 14.1% Meat, Hides and Pelt Products.
- Sprains, strains and tears were the most common nature of injury, accounting for 40.6% of the total lost-time claims.
- The trunk was the most common body part injured, accounting for over one-third of the total claims.
- Incident types involving overexertion or being struck by objects accounted for 38.6% of all claims.
- Workers aged between 25 and 44 years accounted for 56.2% of lost-time claims.
- Claims requiring between one and five days off work accounted for 45.6% of all injuries or diseases.

In 2005...

- The Workers' Compensation Board (WCB) – Alberta accepted 6,460 lost-time claims from Manufacturing, Processing and Packaging workers, representing 18.2% of all lost-time claims in the province.
- The lost-time claim rate for the Manufacturing, Processing and Packaging industries was 3.4 per 100 person-years. The 2004 provincial lost-time claim rate was 2.4 per 100 person-years.
- The duration rate for the Manufacturing, Processing and Packaging industries was 62 days lost per 100 person-years, slightly higher than the provincial duration rate of 57.
- The Gases, Fertilizer and Petrochemical – Refining and Manufacturing sub-sector had the lowest lost-time claim rate of all Manufacturing, Processing and Packaging sub-sectors at 0.4 per 100 person-years. Meat, Hides and Pelt Products had the highest lost-time claim rate at 6.5 per 100 person-years.

- Employers with 20 to 39 person-years had the highest lost-time claim rate at 4.6 per 100 person-years.

- Almost five per cent of employers in the Manufacturing, Processing and Packaging industries had a valid Certificate of Recognition (COR).

- The WCB accepted 19 occupational fatalities for compensation in the Manufacturing, Processing and Packaging industries, representing 13.3% of all workplace fatalities accepted in Alberta.

INTRODUCTION

Role of Alberta Human Resources and Employment

Alberta Human Resources and Employment (AHRE) provides a continuum of services and information to support the development of a skilled and productive labour force; fair, safe, healthy and productive workplaces; and helping improve the well-being of Albertans. AHRE develops and delivers programs and services that contribute to workplaces for employees and employers by:

- working with industry and safety associations to audit and certify health and safety programs
- helping employers, employees, unions and industry associations work together by offering facilitation services, workshops and partnership opportunities
- developing and maintaining policy and legislated employment standards in Alberta
- preparing and providing ongoing support of Alberta's workplace health and safety regulations
- explaining legislated standards under the *Occupational Health and Safety Act* and the *Employment Standards Code* and ensuring compliance through complaint resolution, investigation and targeted inspections.

Occupational Injuries and Diseases in the Manufacturing, Processing and Packaging Industries 2001 to 2005

Each year, AHRE prepares a report on the occupational injuries and diseases in the Manufacturing, Processing and Packaging industries. The purpose of this report is to provide government, employers, workers, and health and safety professionals in the Manufacturing, Processing and Packaging industries with information about key health and safety issues. This report includes:

- an estimation of the risk of injury or disease in addition to general descriptive information about incidents and injured workers
- the number of employers that earned a Certificate of Recognition (COR)
- occupational fatalities accepted by the WCB for compensation and fatality rates for the Manufacturing, Processing and Packaging industries.

Notes about this report:

- This report presents 2005 data beside 2004 data to help with comparisons. Additional historical data are presented where possible.
- Throughout the report, the lost-time claim rate is the number of claims per 100 person-years, and the duration rate is the number of days lost per 100 person-years.
- Estimates of year-on-year change presented in this report are calculated using unrounded figures and may not match those produced from rounded figures.
- In 2005, improvements have been made to the data collection. A stricter definition of a lost-time claim has been adopted and applied to the data covering the period 2001 to 2005. Previously, a small proportion of modified-work claims were also captured as lost-time.
- Improvements have also been made in the analysis by workers occupation. The 2001 National Occupation Classification (NOC) has been adopted for the presentation of figures by occupation. The NOC 2001 provides a standardized framework reflecting the Canadian labour market. For further information please see http://www23.hrdc-drhc.gc.ca/2001/e/generic/welcome.shtml
- Terms, definitions and formulas are described in Appendix A. Industry codes are listed in Appendix B.

LOST-TIME CLAIM RATE AND DURATION RATE

The lost-time claim rate[1] represents the probability or risk of a disabling injury or disease to a worker during a period of one year. The 2005 lost-time claim rate for the Manufacturing, Processing and Packaging industries was 3.4 per 100 person-years.

In 2005, there were 6,460 lost-time claims in the Manufacturing, Processing and Packaging industries, representing 18.2% of the total lost-time claims in the province. The Manufacturing, Processing and Packaging industries' lost-time claim rate was 3.4 per 100 person-years, a increase of 2.7% from 2004 (see Table 2.0). The 2005 provincial lost-time claim rate was 2.4 per 100 person-years. The lost-time claim rate of 3.4 per 100 person-years translates to 17 lost-time claims per million hours worked.

The duration rate is intended to show the severity of the effects of occupational injury and disease as reflected by the number of days off work per 100 person-years. In 2005, the Manufacturing, Processing and Packaging industries had a duration rate of 62, the lowest during the last five years and slightly higher than the provincial duration rate of 57.

Table 2.0
Manufacturing, Processing and Packaging Industries — Alberta: 2001-2005

Year	Number of Accounts	Cost of Claims	Person Years	Days Lost	Duration Rate	Lost-Time Claims	Lost-Time Claim Rate
2001	11,414	$29,739,425	166,863	188,036	113	8,184	4.9
2002	11,540	$30,565,075	172,589	169,163	98	6,961	4.0
2003	11,632	$27,755,884	174,430	142,517	82	6,452	3.7
2004	11,997	$27,097,818	182,098	115,966	64	6,081	3.3
2005	**12,883**	**$29,756,553**	**188,345**	**116,031**	**62**	**6,460**	**3.4**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

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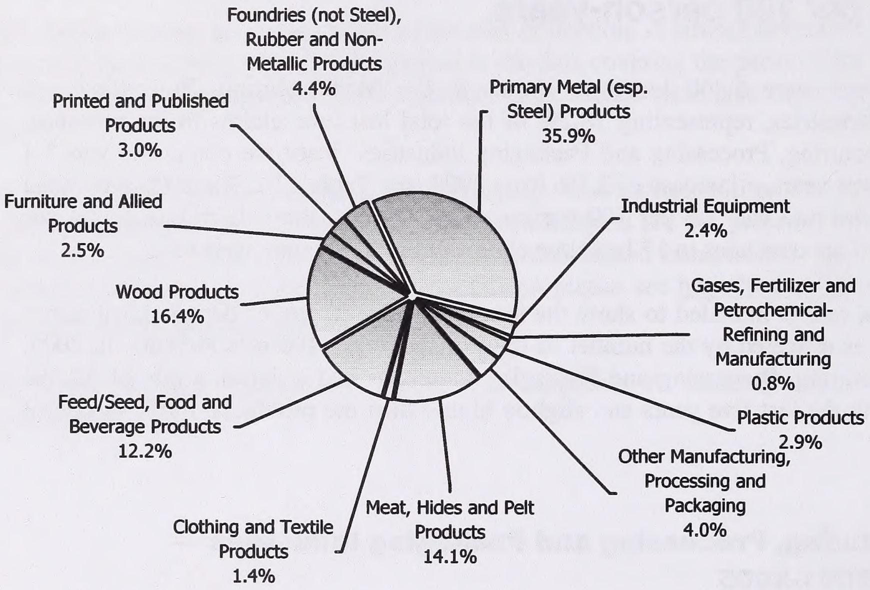
[1] The rate has been calculated from lost-time claims data as of March 31, 2006. This rate underestimates the risk of occupational injury and disease since some lost-time claims that occurred in 2005 were not administered by March 31, 2006.

Between 2001 and 2005, there were 34,138 lost-time claims in the Manufacturing, Processing and Packaging industries. The Primary Metal (especially steel) Products sub-sector accounted for over one-third of total lost-time claims, followed by the Wood Products sub-sector at 16.4%. The Gases, Fertilizer and Petrochemical – Refining and Manufacturing sub-sector had the fewest lost-time claims at 0.8% (see Chart 2.0).

Chart 2.0
Percentages of Lost-Time Claims by Manufacturing, Processing and Packaging Sub-Sector — Alberta: 2001-2005



Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

2.1 Lost-Time Claim Rate by Size of Employer

In the Manufacturing, Processing and Packaging industries, employers with 20 to 39 person-years had the highest lost-time claim rate at 4.6, followed by employers with 10 to 19 person-years at 4.4. Employers with less than 10 person-years and employers with 100 or more person-years both had the lowest lost-time claim rate at 3.0 (see Table 2.1). For the province, employers with 20 to 39 and 40 to 99 person-years had the highest lost-time claim rate at 2.8, while employers with less than 10 person-years had the lowest at 2.2.

Table 2.1
Lost-Time Claim Rate by Size[2] of Employer — Alberta: 2005

Size of Employer	Number of Accounts	Lost-Time Claims	Person-Years	Lost-Time Claims
Less than 10 person-years	10,392	514	17,233	3.0
10 to 19 person-years	806	509	11,465	4.4
20 to 39 person-years	604	799	17,216	4.6
40 to 99 person-years	497	1,230	31,185	3.9
100 or more person-years	390	3,380	111,245	3.0
Unspecified [1]	194	28	0	N/A

[1] These are employers with no payroll information or with person-years equal to zero.
Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

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[2] Size is measured in terms of person-years.

2.2 Lost-Time Claims by Manufacturing, Processing and Packaging Sub-Sector

Between 2001 and 2005, the Meat, Hides and Pelt Products sub-sector had the highest lost-time claim rate. In 2005, this sub-sector had a rate of 6.5. The Gases, Fertilizer and Petrochemical – Refining and Manufacturing sub-sector had the lowest lost-time claim rate over the five year period, and a 2005 rate of 0.4 (see Table 2.2).

Table 2.2
Lost-Time Claim Rate by Manufacturing, Processing and Packaging Sub-Sector — Alberta: 2001-2005

Sub-Sector	2001	2002	2003	2004	2005
Manufacturing, Processing and Packaging Industries	4.9	4.0	3.7	3.3	3.4
Meat, Hides and Pelt Products	7.9	7.4	7.4	6.1	6.5
Clothing and Textile Products	2.7	3.1	3.1	2.0	1.5
Feed/Seed, Food and Beverage Products	6.3	5.3	5.3	4.4	4.5
Wood Products	5.3	4.5	3.8	3.6	3.6
Furniture and Allied Products	8.1	6.7	6.2	4.9	4.5
Printed and Published Products	1.6	1.9	1.5	1.4	1.7
Foundries (not steel), Rubber and Non-metallic Products	4.3	3.8	3.6	3.5	3.6
Primary Metal (esp. steel) Products	6.3	4.6	4.2	3.9	4.0
Industrial Equipment	2.6	2.0	1.8	1.3	1.3
Gases, Fertilizer and Petrochemical Refining and Manufacturing	0.6	0.5	0.4	0.5	0.4
Plastic Products	5.1	5.1	4.1	3.9	3.3
Other Manufacturing, Processing and Packaging Industries	2.3	2.0	1.9	1.8	1.7

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

2.2A Meat, Hides and Pelt Products

In 2005, the Meat, Hides and Pelt Products sub-sector had a lost-time claim rate of 6.5 per 100 person-years, almost twice the rate of 3.4 per 100 person-years for all Manufacturing, Processing and Packaging industries (see Table 2.2A).

Table 2.2A
Meat, Hides and Pelt Products — Alberta: 2001-2005

Year	Number of Accounts	Cost of Claims	Person Years	Days Lost	Duration Rate	Lost-Time Claims	Lost-Time Claim Rate
2001	167	$3,215,054	12,772	19,500	153	1,008	7.9
2002	160	$3,323,168	13,399	18,583	139	992	7.4
2003	156	$3,776,210	13,116	18,540	141	965	7.4
2004	156	$3,503,950	14,636	14,048	96	894	6.1
2005	**156**	**$4,478,638**	**14,682**	**14,715**	**100**	**953**	**6.5**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

2.2B Clothing and Textile Products

In 2005, the lost-time claim rate for the Clothing and Textile Products sub-sector decreased by 25.1% to 1.5 per 100 person-years, the lowest in the last five years. The duration rate fell from 41 to 40 days lost per 100 person-years (see Table 2.2B).

Table 2.2B
Clothing and Textile Products — Alberta: 2001-2005

Year	Number of Accounts	Cost of Claims	Person Years	Days Lost	Duration Rate	Lost-Time Claims	Lost-Time Claim Rate
2001	466	$340,784	4,165	3,196	77	114	2.7
2002	465	$425,758	3,718	3,170	85	117	3.1
2003	452	$555,695	3,969	3,499	88	123	3.1
2004	459	$214,944	3,673	1,516	41	72	2.0
2005	**439**	**$284,209**	**3,676**	**1,457**	**40**	**54**	**1.5**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

2.2C Feed/Seed, Food and Beverage Products

In 2005, the lost-time claim rate for the Feed/Seed, Food and Beverage Products sub-sector increased by 2.0% to 4.5 per 100 person-years. The duration rate fell by 7.5% from 73 to 67 days lost per 100 person-years (see Table 2.2C).

Table 2.2C
Feed/Seed, Food and Beverage Products — Alberta: 2001-2005

Year	Number of Accounts	Cost of Claims	Person Years	Days Lost	Duration Rate	Lost-Time Claims	Lost-Time Claim Rate
2001	683	$3,211,907	15,424	23,683	154	978	6.3
2002	674	$3,724,679	16,277	20,892	128	855	5.3
2003	672	$3,051,075	15,897	16,189	102	846	5.3
2004	647	$2,606,984	16,871	12,255	73	747	4.4
2005	**631**	**$2,704,077**	**16,224**	**10,903**	**67**	**733**	**4.5**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

2.2D Wood Products

In 2005, the Wood Products sub-sector lost-time claim rate was 3.6 per 100 person-years. The duration rate in 2005 was 72 per 100 person-years, a 7.0% increase from 2004 (see Table 2.2D).

Table 2.2D
Wood Products — Alberta: 2001-2005

Year	Number of Accounts	Cost of Claims	Person Years	Days Lost	Duration Rate	Lost-Time Claims	Lost-Time Claim Rate
2001	1,057	$4,733,078	26,282	32,950	125	1,400	5.3
2002	1,042	$5,358,901	27,273	30,387	111	1,221	4.5
2003	1,044	$4,905,542	26,834	23,824	89	1,015	3.8
2004	1,044	$4,049,240	27,497	18,529	67	987	3.6
2005	**1,052**	**$4,863,367**	**27,491**	**19,826**	**72**	**992**	**3.6**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

2.2E Furniture and Allied Products

The Furniture and Allied Products sub-sector had a lost-time claim rate of 4.5 per 100 person-years in 2005, the lowest rate during the past five years and a reduction of 9.2% from 2004. The duration rate fell by 24.0% from 142 to 108 days lost per 100 person-years in 2005 (see Table 2.2E).

Table 2.2E
Furniture and Allied Products — Alberta: 2001-2005

Year	Number of Accounts	Cost of Claims	Person Years	Days Lost	Duration Rate	Lost-Time Claims	Lost-Time Claim Rate
2001	550	$602,182	2,589	4,367	169	210	8.1
2002	655	$773,953	2,627	5,627	214	175	6.7
2003	825	$935,252	2,835	5,763	203	175	6.2
2004	948	$849,093	3,116	4,434	142	153	4.9
2005	**1,028**	**$643,947**	**3,184**	**3,444**	**108**	**142**	**4.5**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

2.2F Printed and Published Products

The Printed and Published Products sub-sector had a lost-time claim rate of 1.7 per 100 person-years in 2005, half the rate of all Manufacturing, Processing and Packaging industries. The duration rate increased slightly in 2005 from 43 to 46 days lost per 100 person-years (see Table 2.2F).

Table 2.2F
Printed and Published Products — Alberta: 2001-2005

Year	Number of Accounts	Cost of Claims	Person Years	Days Lost	Duration Rate	Lost-Time Claims	Lost-Time Claim Rate
2001	563	$575,725	12,519	4,741	38	206	1.6
2002	566	$1,042,767	12,165	6,735	55	227	1.9
2003	539	$765,396	12,863	5,426	42	191	1.5
2004	511	$689,349	13,718	5,856	43	195	1.4
2005	**521**	**$924,824**	**12,345**	**5,622**	**46**	**213**	**1.7**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

2.2G Foundries (not Steel), Rubber and Non-metallic Products

The lost-time claim rate for Foundries (not Steel), Rubber and Non-metallic Products was 3.6 per 100 person-years in 2005. The duration rate fell slightly from 96 to 82 days lost per 100 person-years (see Table 2.2G).

Table 2.2G
Foundries (not Steel), Rubber and Non-metallic Products — Alberta: 2001-2005

Year	Number of Accounts	Cost of Claims	Person Years	Days Lost	Duration Rate	Lost-Time Claims	Lost-Time Claim Rate
2001	278	$1,414,686	6,719	8,463	126	289	4.3
2002	282	$1,464,801	7,690	7,824	102	293	3.8
2003	296	$1,508,524	7,767	7,592	98	280	3.6
2004	300	$1,890,887	8,908	8,515	96	314	3.5
2005	**321**	**$2,140,243**	**9,241**	**7,589**	**82**	**331**	**3.6**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

2.2H Primary Metal (esp. Steel) Products

The lost-time claim rate for Primary Metal (esp. Steel) Products was 4.0 per 100 person-years in 2005. The duration rate fell to a five-year low, from 72 days lost to 70 per 100 person-years, a reduction of 2.5% (see Table 2.2H).

Table 2.2H
Primary Metal (esp. Steel) Products — Alberta: 2001-2005

Year	Number of Accounts	Cost of Claims	Person Years	Days Lost	Duration Rate	Lost-Time Claims	Lost-Time Claim Rate
2001	6,013	$12,561,706	49,814	71,763	144	3,154	6.3
2002	6,034	$10,299,163	50,216	56,575	113	2,316	4.6
2003	5,986	$9,116,379	52,100	45,459	87	2,198	4.2
2004	6,306	$9,474,597	53,332	38,300	72	2,090	3.9
2005	**7,097**	**$11,293,287**	**61,863**	**43,338**	**70**	**2,494**	**4.0**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

2.2I Industrial Equipment

The lost-time claim rate for Industrial Equipment was 1.3 per 100 person-years in 2005. The duration rate decreased by 6.6% to 23 days lost per 100 person-years in 2005 (see Table 2.2I).

Table 2.2I
Industrial Equipment — Alberta: 2001-2005

Year	Number of Accounts	Cost of Claims	Person Years	Days Lost	Duration Rate	Lost-Time Claims	Lost-Time Claim Rate
2001	430	$657,259	7,974	4,059	51	208	2.6
2002	426	$1,013,440	8,491	4,046	48	171	2.0
2003	434	$716,602	8,760	3,193	36	156	1.8
2004	419	$851,589	10,963	2,692	25	138	1.3
2005	**432**	**$815,068**	**10,289**	**2,361**	**23**	**137**	**1.3**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

2.2J Gases, Fertilizer and Petrochemical – Refining and Manufacturing

In 2005, the Gases, Fertilizer and Petrochemical – Refining and Manufacturing lost-time claim rate was 0.4 per 100 person-years, the lowest rate of all sub-sectors in the Manufacturing, Processing and Packaging industries. The duration rate in 2005 remained the same, eight days lost per 100 person-years (see Table 2.2J).

Table 2.2J
Gases, Fertilizer and Petrochemical – Refining and Manufacturing — Alberta: 2001-2005

Year	Number of Accounts	Cost of Claims	Person Years	Days Lost	Duration Rate	Lost-Time Claims	Lost-Time Claim Rate
2001	80	$364,274	9,451	1,861	20	56	0.6
2002	90	$1,068,348	10,487	1,239	12	50	0.5
2003	85	$315,157	11,462	1,142	10	42	0.4
2004	86	$915,950	11,282	860	8	60	0.5
2005	**94**	**$365,415**	**12,328**	**951**	**8**	**52**	**0.4**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

2.2K Plastic Products

The lost-time claim rate for Plastic Products was 3.3 per 100 person-years in 2005, a 14.8% decrease from 2004 and the lowest rate over the last five years. The duration rate was 45 days lost per 100 person-years, also the lowest rate in the past five years and a 26.5% reduction from 2004 (see Table 2.2K).

Table 2.2K
Plastic Products — Alberta: 2001-2005

Year	Number of Accounts	Cost of Claims	Person Years	Days Lost	Duration Rate	Lost-Time Claims	Lost-Time Claim Rate
2001	159	$571,196	4,430	3,908	88	227	5.1
2002	159	$787,080	4,609	5,835	127	235	5.1
2003	164	$693,845	4,794	3,905	81	197	4.1
2004	152	$656,195	4,976	3,053	61	192	3.9
2005	**149**	**$468,573**	**4,626**	**2,087**	**45**	**152**	**3.3**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

INJURY AND DISEASE ANALYSIS

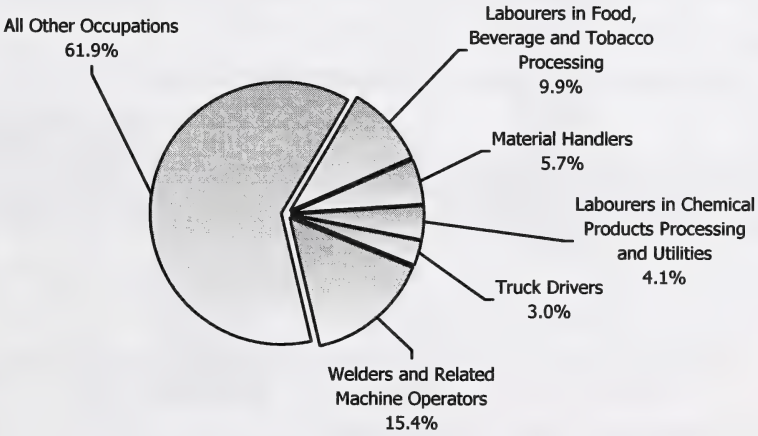
Overexertion was the most common cause for lost-time claims in the Manufacturing, Processing and Packaging industries. Sprains, strains and tears continued to be the leading nature of injury with the trunk being the most commonly injured body part.

This section describes the characteristics of the injured workers and the nature of their injuries or diseases. Tables are provided to enable comparisons of 2005 injuries and diseases in Manufacturing, Processing and Packaging industries with provincial averages and trends. A detailed explanation of the formulas for calculating the indicators of the comparison tables is available in Appendix A.

3.1 Injured Worker Characteristics

In 2005, five occupations accounted for 38.1% of lost-time claims. Welders and related machine operators had the most claims at 15.4%, followed by labourers in food, beverage and tobacco processing at 9.9% (see Chart 3.1A).

Chart 3.1A
Lost-Time Claims by Occupation — Alberta: 2005



Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

Between 2001 and 2005, workers aged 25 to 44 years accounted for 56.2% of all lost-time claims. Young workers aged between 15 and 24 accounted for 19.6% of total claims, while workers aged 45 years and older represented 24.2% of claims (see Table 3.1A).

Table 3.1A
Lost-Time Claims by Age — Alberta: 2001-2005

						Total	
Age	**2001**	**2002**	**2003**	**2004**	**2005**	**Lost-Time Claims**	**%**
15-19 Years	546	392	318	325	**327**	1,908	5.6%
20-24 Years	1,258	916	876	845	**887**	4,782	14.0%
25-34 Years	2,417	1,948	1,755	1,607	**1,705**	9,432	27.6%
35-44 Years	2,338	2,068	1,873	1,747	**1,746**	9,772	28.6%
45-54 Years	1,155	1,188	1,168	1,086	**1,261**	5,858	17.2%
55-64 Years	428	399	418	425	**467**	2,137	6.3%
65+ Years	32	40	42	44	**66**	224	0.7%
Unspecified	10	10	2	2	**1**	25	0.1%
Total	**8,184**	**6,961**	**6,452**	**6,081**	**6,460**	**34,138**	**100.0%**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

In the Manufacturing, Processing and Packaging industries, the majority of claims were from men. Between 2001 and 2005, 80.7% of lost-time claims involved men. Lost-time claims from women accounted for 17.4% of the total claims (see Table 3.1B).

Table 3.1B
Lost-Time Claims by Gender — Alberta: 2001-2005

						Total	
Gender	**2001**	**2002**	**2003**	**2004**	**2005**	**Lost-Time Claims**	**%**
Men	6,668	5,575	5,159	4,933	5,223	27,558	80.7%
Women	1,313	1,219	1,163	1,083	1,148	5,926	17.4%
Unspecified	203	167	130	65	89	654	1.9%
Total	**8,184**	**6,961**	**6,452**	**6,081**	**6,460**	**34,138**	**100.0%**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

3.2 Nature of Injury or Disease

The nature of injury is used to identify the physical characteristics of the injury or disease. Between 2001 and 2005, 88.6% of lost-time claims were caused by traumatic injuries and disorders. The four most common traumatic injuries and disorders were: sprains, strains and tears, 40.6%, surface wounds and bruises, 14.5%, open wounds, 13.5%, and fractures and dislocations, 7.8% (see Table 3.2A).

Table 3.2A
Nature of Injury or Disease — Alberta: 2001-2005

Nature of Injury or Disease	2001	2002	2003	2004	2005	Total Lost-Time Claims	Total %
Traumatic Injuries and Disorders	**7,239**	**6,159**	**5,693**	**5,382**	**5,788**	**30,261**	**88.6%**
Sprains, Strains and Tears	3,401	2,895	2,651	2,406	2,523	13,876	40.6%
Surface Wounds and Bruises	1,227	939	863	923	1,015	4,967	14.5%
Open Wounds	1,117	957	890	811	830	4,605	13.5%
Fractures and Dislocations	609	568	513	472	511	2,673	7.8%
Burns	200	149	157	122	172	800	2.3%
Other Traumatic Injuries and Disorders	685	651	619	648	737	3,340	9.8%
Systemic Diseases and Disorders	**559**	**424**	**448**	**463**	**432**	**2,326**	**6.8%**
Symptoms, Signs and Ill-Defined Conditions	**9**	**29**	**23**	**18**	**20**	**99**	**0.3%**
Other Diseases, Conditions and Disorders	**6**	**6**	**4**	**3**	**6**	**25**	**0.1%**
Infectious and Parasitic Diseases	**5**	**3**	**6**	**5**	**4**	**23**	**0.1%**
Multiple Diseases, Conditions and Disorders	**4**	**3**	**1**	**1**	**2**	**11**	**<0.1%**
Neoplasms, Tumors and Cancer	**0**	**0**	**1**	**3**	**3**	**7**	**<0.1%**
Nature of Injury - Unknown	**362**	**337**	**276**	**206**	**205**	**1,386**	**4.1%**
Total	**8,184**	**6,961**	**6,452**	**6,081**	**6,460**	**34,138**	**100.0%**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

In 2005, sprains, strains and tears accounted for 39.1% of all claims in the Manufacturing, Processing and Packaging industries. This was 1.2 times higher than the average percentage of injuries for this nature of injury category for the province. Percentages of injuries in all nature of injury categories were higher than the provincial average, except other diseases, conditions and disorders and infectious and parasitic diseases (see Table 3.2B).

Table 3.2B
Nature of Injury or Disease — Comparison 2005[3]

Nature of Injury or Disease	% of Manufacturing, Processing and Packaging Industries' Claims	% of Total Provincial Claims	Number of Times Higher/Lower than the Provincial Average
Traumatic Injuries and Disorders	**89.7%**	**90.9%**	**1.4**
Sprains, Strains and Tears	39.1%	47.6%	1.2
Surface Wounds and Bruises	15.7%	11.5%	1.9
Open Wounds	12.9%	9.2%	2.0
Fractures and Dislocations	7.9%	8.9%	1.3
Burns	2.7%	2.7%	1.4
Other Traumatic Injuries and Disorders	11.4%	10.9%	1.5
Systemic Diseases and Disorders	**6.7%**	**4.9%**	**1.9**
Symptoms, Signs and Ill-Defined Conditions	**0.3%**	**0.3%**	**1.4**
Other Diseases, Conditions and Disorders	**0.1%**	**0.2%**	**0.6**
Infectious and Parasitic Diseases	**0.1%**	**<0.1%**	**2.1**
Multiple Diseases, Conditions and Disorders	**<0.1%**	**<0.1%**	**2.0**
Neoplasms, Tumors and Cancer	**<0.1%**	**<0.1%**	**2.1**
Nature of Injury - Unknown	**3.1%**	**3.5%**	**1.3**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

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[3] Number of Times Higher/Lower than the Provincial Average: 1 indicates that the injury percentage of the industries is equal to the provincial average; greater than 1 indicates that the injury percentage of the industries is higher than the provincial average; less than 1 indicates that the injury percentage of the industries is lower than the provincial average. See Appendix A for calculation details.

3.3 Part of Body Injured

Between 2001 and 2005, the trunk was the main injured body part, accounting for over one-third of lost-time claims in the Manufacturing, Processing and Packaging industries, followed by upper extremities, at 31.5% and lower extremities at 16.4%. The most common trunk injury was to the back, including spine and spinal cord, representing 23.1% of the total lost-time claims (see Table 3.3A).

Table 3.3A
Part of Body Injured — Alberta: 2001-2005

						Total	
Part of Body Injured	**2001**	**2002**	**2003**	**2004**	**2005**	**Lost-Time Claim**	**%**
Trunk	**2,912**	**2,499**	**2,242**	**2,145**	**2,207**	**12,005**	**35.2%**
Back, Including Spine, Spinal Cord	1,913	1,669	1,477	1,400	1,429	7,888	23.1%
Other Trunk	999	830	765	745	778	4,117	12.1%
Upper Extremities	**2,642**	**2,192**	**2,058**	**1,900**	**1,970**	**10,762**	**31.5%**
Wrist(s) and Hand(s) Except Finger(s)	935	740	719	649	712	3,755	11.0%
Finger(s), Fingernail(s)	1,118	935	863	789	789	4,494	13.2%
Other Upper Extremities	589	517	476	462	469	2,513	7.4%
Lower Extremities	**1,348**	**1,132**	**1,053**	**995**	**1,081**	**5,609**	**16.4%**
Ankle(s) and Foot (Feet) Except Toes	625	547	489	450	476	2,587	7.6%
Leg(s)	637	506	485	488	534	2,650	7.8%
Other Lower Extremities	86	79	79	57	71	372	1.1%
Head	**789**	**594**	**614**	**647**	**779**	**3,423**	**10.0%**
Eye(s)	532	355	364	387	480	2,118	6.2%
Other Head Parts	257	239	250	260	299	1,305	3.8%
Multiple Body Parts	**304**	**392**	**353**	**284**	**273**	**1,606**	**4.7%**
Neck, Including Throat	**140**	**103**	**99**	**79**	**111**	**532**	**1.6%**
Body Systems	**21**	**22**	**14**	**18**	**24**	**99**	**0.3%**
Part of Body - Unknown	**26**	**26**	**17**	**12**	**15**	**96**	**0.3%**
Other Body Parts	**2**	**1**	**2**	**1**	**0**	**6**	**0.0%**
Total	**8,184**	**6,961**	**6,452**	**6,081**	**6,460**	**34,138**	**100.0%**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

In 2005, the back, including spine and spinal cord accounted for 22.1% of all claims in the Manufacturing, Processing and Packaging industries. This was 1.2 times higher than the average percentage of injuries for this part of body category for the whole province. Percentages of injuries in all part of body categories were higher than or equal to the provincial average, except multiple body parts (see Table 3.3B).

Table 3.3B
Part of Body Injured — Comparison 2005[4]

Part of Body Injured	% of Manufacturing, Processing and Packaging Industries' Claims	% of Total Provincial Claims	Number of Times Higher/Lower than the Provincial Average
Trunk	**34.2%**	**38.6%**	**1.3**
Back, Including Spine, Spinal Cord	22.1%	26.0%	1.2
Other Trunk	12.1%	12.6%	1.4
Upper Extremities	**30.5%**	**23.8%**	**1.8**
Wrist(s) and Hand(s) Except Finger(s)	11.0%	9.2%	1.7
Finger(s), Fingernail(s)	12.2%	8.1%	2.2
Other Upper Extremities	7.3%	6.5%	1.6
Lower Extremities	**16.8%**	**19.8%**	**1.2**
Ankle(s) and Foot (Feet) Except Toes	7.4%	8.8%	1.2
Leg(s)	8.3%	9.8%	1.2
Other Lower Extremities	1.1%	1.2%	1.3
Head	**12.0%**	**7.9%**	**2.2**
Eye(s)	7.4%	3.2%	3.3
Other Head Parts	4.6%	4.7%	1.4
Multiple Body Parts	**4.2%**	**7.0%**	**0.9**
Neck, Including Throat	**1.7%**	**2.3%**	**1.1**
Body Systems	**0.4%**	**0.5%**	**1.2**
Part of Body - Unknown	**0.2%**	**0.2%**	**1.2**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

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[4] Number of Times Higher/Lower than the Provincial Average: 1 indicates that the injury percentage of the industries is equal to the provincial average; greater than 1 indicates that the injury percentage of the industries is higher than the provincial average; less than 1 indicates that the injury percentage of the industries is lower than the provincial average. See Appendix A for calculation details.

3.4 Source of Injury or Disease

The source of injury or disease describes the object or substance that came into contact with the worker and resulted in an injury or disease. Between 2001 and 2005, two primary sources of injury accounted for 36.0% of total claims. Persons, plants, animals and minerals accounted for 18.8% and parts and materials, 17.2% (see Table 3.4A).

Table 3.4A
Source of Injury or Disease — Alberta: 2001-2005

						Total	
Source of Injury or Disease	**2001**	**2002**	**2003**	**2004**	**2005**	**Number**	**%**
Persons, Plants, Animals and Minerals	**1,321**	**1,224**	**1,358**	**1,268**	**1,261**	**6,432**	**18.8%**
Person - Injured or Ill Worker	1,169	1,074	1,207	1,121	1,101	5,672	16.6%
Person - Other Than Injured or Ill Worker [1]	18	11	9	17	19	74	0.2%
Minerals - Metallic or Nonmetallic (except fuel)	15	11	10	10	15	61	0.2%
Other Persons, Plants, Animals & Minerals	119	128	132	120	126	625	1.8%
Parts and Materials	**1,474**	**1,104**	**1,114**	**1,028**	**1,146**	**5,866**	**17.2%**
Structures and Surfaces	**755**	**758**	**710**	**677**	**736**	**3,636**	**10.7%**
Source of Injury - Unknown	**1,570**	**1,265**	**736**	**668**	**635**	**4,874**	**14.3%**
Containers [2]	**746**	**617**	**605**	**542**	**560**	**3,070**	**9.0%**
Machinery	**663**	**592**	**556**	**533**	**542**	**2,886**	**8.5%**
Tools, Instruments and Equipment	**646**	**521**	**500**	**479**	**557**	**2,703**	**7.9%**
Hand tools - Non-powered	352	276	279	267	265	1,439	4.2%
Hand tools - Powered	176	131	124	122	175	728	2.1%
Other Tools and Equipment	118	114	97	90	117	536	1.6%
Vehicles	**246**	**267**	**209**	**194**	**204**	**1,120**	**3.3%**
Furniture and Fixtures	**209**	**152**	**154**	**140**	**142**	**797**	**2.3%**
Chemicals and Chemical Products	**96**	**68**	**79**	**61**	**91**	**395**	**1.2%**
Other Sources	**458**	**393**	**431**	**491**	**586**	**2,359**	**6.9%**
Total	**8,184**	**6,961**	**6,452**	**6,081**	**6,460**	**34,138**	**100.0%**

[1] Person – other than injured or ill worker: classifies injuries or illnesses inflicted by family members as well as non-family relations, including co-workers, former co-workers, and patients.

[2] Containers: classifies receptacles that are commonly used to hold, store or carry materials (examples: dishes, cups and glasses, luggage, etc.).

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

In 2005, person – injured or ill worker accounted for 19.6% of all claims in the Manufacturing, Processing and Packaging industries. This was 1.4 times higher than the average percentage of injuries for this source of injury category for the province. The percentages of injuries caused by other persons, plants, animals and minerals was three times that of the province and powered hand tools were 3.6 times higher than the provincial average (see Table 3.4B).

Table 3.4B
Source of Injury or Disease — Comparison 2005[5]

Source of Injury or Disease	% of Manufacturing, Processing and Packaging Industries' Claims	% of Total Provincial Claims	Number of Times Higher/Lower than the Provincial Average
Persons, Plants, Animals and Minerals	**19.6%**	**24.5%**	**1.1**
Person - Injured or Ill Worker	17.1%	17.4%	1.4
Person - Other Than Injured or Ill Worker	0.3%	5.0%	0.1
Minerals - Metallic or Nonmetallic (except fuel)	0.2%	0.4%	0.8
Other Persons, Plants, Animals & Minerals	2.0%	1.7%	3.0
Parts and Materials	**17.8%**	**10.5%**	**2.4**
Structures and Surfaces	**11.4%**	**16.7%**	**1.0**
Containers	**8.7%**	**10.1%**	**1.2**
Tools, Instruments and Equipment	**8.6%**	**6.7%**	**1.8**
Hand tools - Non-powered	4.1%	3.4%	1.7
Hand tools - Powered	2.7%	1.1%	3.6
Other Tools and Equipment	1.8%	2.2%	1.2
Machinery	**8.4%**	**5.6%**	**2.1**
Vehicles	**3.2%**	**7.4%**	**0.6**
Furniture and Fixtures	**2.2%**	**3.1%**	**1.0**
Chemicals and Chemical Products	**1.4%**	**1.2%**	**1.6**
Source of Injury - Unknown	**9.8%**	**8.8%**	**1.6**
Other Sources	**9.0%**	**5.2%**	**2.5**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

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[5] Number of Times Higher/Lower than the Provincial Average: 1 indicates that the injury percentage of the industries is equal to the provincial average; greater than 1 indicates that the injury percentage of the industries is higher than the provincial average; less than 1 indicates that the injury percentage of the industries is lower than the provincial average. See Appendix A for calculation details.

3.5 Type of Event or Exposure

The type of event or exposure describes the incident or event that occurred at the time of the exposure that directly resulted in the injury or disease. The two most common types of event or exposure comprising nearly three-quarters of the total lost-time claims in the Manufacturing, Processing and Packaging industries in the last five years are: bodily reaction and exertion, 38.8%, and contact with objects and equipment, 35.5%.

Table 3.5A
Type of Event or Exposure — Alberta: 2001-2005

						Total	
Type of Event or Exposure	2001	2002	2003	2004	2005	Lost-Time Claims	%
Body Reaction and Exertion	**3,097**	**2,568**	**2,649**	**2,438**	**2,485**	**13,237**	**38.8%**
Overexertion	1,882	1,459	1,397	1,272	1,313	7,323	21.5%
Bodily Reaction [1]	723	664	741	626	587	3,341	9.8%
Repetitive Motion	375	349	422	437	457	2,040	6.0%
Other Bodily Reaction/Exertion	117	96	89	103	128	533	1.6%
Contact with Objects and Equipment	**2,938**	**2,341**	**2,236**	**2,176**	**2,417**	**12,108**	**35.5%**
Struck by Object	1,405	1,153	1,076	1,092	1,126	5,852	17.1%
Caught in Object	703	605	558	472	554	2,892	8.5%
Struck against Object	553	421	406	351	403	2,134	6.3%
Rubbed or Abraded	256	132	141	171	253	953	2.8%
Other Contact with Object/Equipment	21	30	55	90	81	277	0.8%
Falls	**889**	**837**	**737**	**683**	**744**	**3,890**	**11.4%**
Fall on Same Level	504	494	473	424	454	2,349	6.9%
Fall to Lower Level	286	246	204	202	204	1,142	3.3%
Other Falls	99	97	60	57	86	399	1.2%
Exposure to Harmful Substances	**330**	**269**	**300**	**266**	**355**	**1,520**	**4.5%**
Transportation Accidents	**126**	**131**	**98**	**108**	**108**	**571**	**1.7%**
Assaults and Violent Acts	**16**	**15**	**14**	**14**	**20**	**79**	**0.2%**
Assaults and Violent Acts by Person(s)	13	11	9	12	13	58	0.2%
Other Assaults and Violent Acts	3	4	5	2	7	21	0.1%
Fires and Explosions	**8**	**14**	**12**	**10**	**16**	**60**	**0.2%**
Type of Event - Unknown	**780**	**786**	**406**	**386**	**315**	**2,673**	**7.8%**
Total	**8,184**	**6,961**	**6,452**	**6,081**	**6,460**	**34,138**	**100.0%**

[1] Bodily reaction: injuries or illnesses resulting from a single incident of free bodily motion which imposed stress or strain on some part of the body.

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

In 2005, overexertion accounted for 20.3% of all claims in the Manufacturing, Processing and Packaging industries; this was 1.3 times higher than the average percentage of injuries for this type of event category for the province. The percentage of injuries due to being rubbed or abraded was 3.7 times higher than the provincial average (see Table 3.5B).

Table 3.5B
Type of Event or Exposure — Comparison 2005[6]

Type of Event or Exposure	% of Manufacturing, Processing and Packaging Industries' Claims	% of Total Provincial Claims	Number of Times Higher/Lower than the Provincial Average
Bodily Reaction and exertion	**38.5%**	**41.4%**	**1.3**
Overexertion	20.3%	23.0%	1.3
Bodily Reaction	9.1%	11.8%	1.1
Repetitive Motion	7.1%	4.7%	2.1
Other Bodily Reaction/Exertion	2.0%	1.9%	1.5
Contact with Objects and Equipment	**37.4%**	**25.5%**	**2.0**
Struck by Object	17.4%	13.2%	1.9
Caught in Object	8.6%	4.4%	2.8
Struck against Object	6.2%	5.5%	1.6
Rubbed or Abraded	3.9%	1.5%	3.7
Other Contact with Object/Equipment	1.3%	0.9%	1.9
Falls	**11.5%**	**16.9%**	**1.0**
Fall on Same Level	7.0%	10.4%	1.0
Fall to Lower Level	3.2%	5.0%	0.9
Other Falls	1.3%	1.5%	1.3
Exposure to Harmful Substances	**5.5%**	**4.6%**	**1.7**
Transportation Accidents	**1.7%**	**4.9%**	**0.5**
Assaults and Violent Acts by Person(s)	**0.2%**	**1.6%**	**0.2**
Other Assaults and Violent Acts	**0.1%**	**1.3%**	**0.5**
Fires and Explosions	**0.2%**	**0.2%**	**2.2**
Type of Event - Unknown	**4.8%**	**4.9%**	**1.4**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

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[6] Number of Times Higher/Lower than the Provincial Average: 1 indicates that the injury percentage of the industries is equal to the provincial average; greater than 1 indicates that the injury percentage of the industries is higher than the provincial average; less than 1 indicates that the injury percentage of the industries is lower than the provincial average. See Appendix A for calculation details.

3.6 Duration of Disability

Duration of disability[7] is intended to reflect the severity of the effects of occupational injury and disease as reflected by the number of days off work. However, the efforts of employers to introduce modified work programs to integrate injured workers more quickly back into the workforce can have a positive impact on workdays lost.

Between 2001 and 2005, claims with duration of disability between one and five days accounted for 45.6% of all claims, followed by six to ten days at 14.2%. Lost-time claims resulting in 51 days or more lost accounted for 12.4% of all claims in the past five years (see Table 3.6A).

Table 3.6A
Duration of Disability — Alberta: 2001-2005

						Total	
Duration of Disability	**2001**	**2002**	**2003**	**2004**	**2005**	**Lost-Time Claims**	**%**
1-5 Days	3,803	3,100	2,913	2,784	**2,979**	15,579	45.6%
6-10 Days	1,212	977	927	825	**894**	4,835	14.2%
11-15 Days	575	501	459	447	**468**	2,450	7.2%
16-20 Days	374	315	314	272	**348**	1,623	4.8%
21-30 Days	447	404	352	388	**392**	1,983	5.8%
31-40 Days	335	299	269	283	**262**	1,448	4.2%
41-50 Days	223	216	195	170	**189**	993	2.9%
51 Days or More	1,093	1,002	867	641	**622**	4,225	12.4%
Unspecified	122	147	156	271	**306**	1,002	2.9%
Total	8,184	6,961	6,452	6,081	**6,460**	34,138	100.0%

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

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[7] The duration of disability refers to the length of time, in days, for which the worker receives wage compensation from the WCB.

In 2005, claims with one to five days duration of disability accounted for 46.1% of all claims in the Manufacturing, Processing and Packaging industries. This was 1.6 times higher than the average percentage of injuries for claims of this duration for the whole province. Percentages of injuries in all duration categories were equal to or higher than the provincial average (see Table 3.6B).

Table 3.6B
Duration of Disability — Comparison 2005[8]

Duration of Disability	% of Manufacturing, Processing and Packaging Industries' Claims	% of Total Provincial Claims	Number of Times Higher/Lower than the Provincial Average
1-5 Days	46.1%	40.4%	1.6
6-10 Days	13.8%	13.8%	1.4
11-15 Days	7.2%	7.9%	1.3
16-20 Days	5.4%	5.3%	1.5
21-30 Days	6.1%	6.9%	1.3
31-40 Days	4.1%	5.0%	1.2
41-50 Days	2.9%	3.6%	1.2
51 Days or More	9.6%	13.4%	1.0
Unspecified	4.7%	3.6%	1.8

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

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[8] Number of Times Higher/Lower than the Provincial Average: 1 indicates that the injury percentage of the industries is equal to the provincial average; greater than 1 indicates that the injury percentage of the industries is higher than the provincial average; less than 1 indicates that the injury percentage of the industries is lower than the provincial average. See Appendix A for calculation details.

OCCUPATIONAL FATALITIES

In 2005 the WCB accepted 19 fatalities in the Manufacturing, Processing and Packaging industries, accounting for 13.3% of all 143 fatalities in the province.

A WCB accepted occupational fatality is defined as the death of a worker, resulting from a work-related incident or exposure, which has been accepted by the WCB for compensation. The WCB classifies occupational fatalities into three general types:

Motor Vehicle Incidents

Motor vehicle incidents typically involve non-industrial vehicles operating on public roads in which the fatally injured worker was either the driver or a passenger. This type of occupational fatality also includes cases involving aircraft, train, helicopter and water vehicle crashes. In 2005, three Manufacturing, Processing and Packaging fatalities accepted by WCB were motor vehicle incidents (see Table 4.0).

Workplace Incidents

Workplace incidents consist of cases in which the worker died at a worksite or as a result of injuries sustained at a worksite. This is the type of fatality that AHRE typically investigates. In 2005, seven of the Manufacturing, Processing and Packaging fatalities accepted by WCB were workplace incidents (see Table 4.0).

Occupational Disease

Occupational disease fatalities consist mostly of recognized occupational diseases, that is, diseases known to be primarily or exclusively work-related. This category also includes heart attacks suffered on the job. Occupational diseases are frequently diagnosed several years after the initial or crucial exposure to the toxic substance, and in such cases, it is difficult to determine when the fatal exposure occurred. *The occupational disease category, therefore, should not be interpreted to reflect present worksite hazardous conditions or exposures.*

Each year the WCB accepts some occupational fatality claims for compensation. Occupational fatality claims that were accepted in a particular year may include fatalities from prior years. In 2005, nine of the fatalities accepted by the WCB in the Manufacturing, Processing and Packaging industries were occupational disease incidents (see Table 4.0).

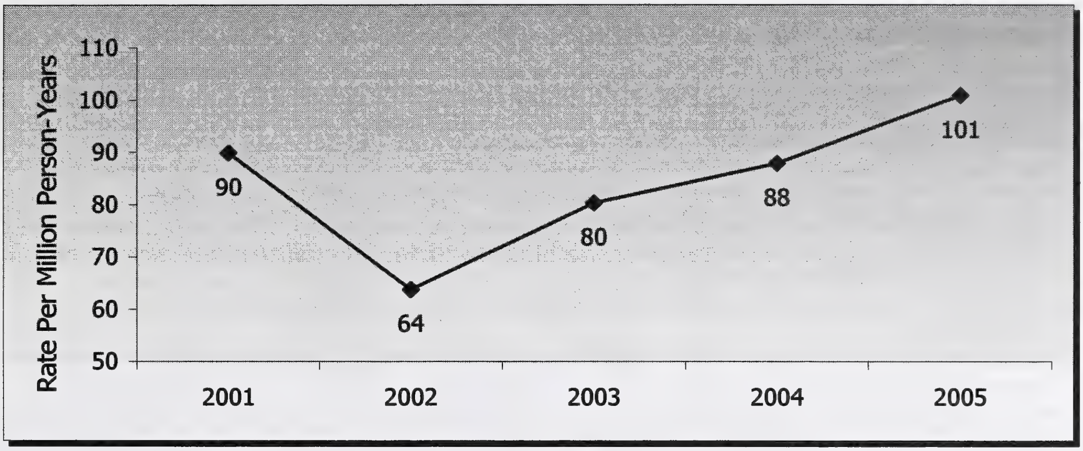
Table 4.0
Types of Occupational Fatalities Accepted by the WCB – Alberta: 2001-2005

Year	Motor Vehicle Incident		Workplace Incident		Occupational Disease		Total
	Number of Fatalities	%	Number of Fatalities	%	Number of Fatalities	%	Number of Fatalities
2001	4	26.7%	2	13.3%	9	60.0%	15
2002	3	27.3%	2	18.2%	6	54.5%	11
2003	1	7.1%	3	21.4%	10	71.4%	14
2004	2	12.5%	6	37.5%	8	50.0%	16
2005	**3**	**15.8%**	**7**	**36.8%**	**9**	**47.4%**	**19**
Total	13	17.3%	20	26.7%	42	56.0%	75

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

The fatality rate is calculated by dividing the number of accepted fatalities in the year by the number of person-years in that year. The result is expressed as "per million person-years." The 2005 fatality rate increased by 14.8% from 88 per million person-years in 2004 to 101 per million person-years in 2005 (see Chart 4.0).

Chart 4.0
Fatality Rate[9] in Manufacturing, Processing and Packaging Industries: 2001-2005



Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

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[9] Estimates are based upon information provided by the WCB. Fatalities occurring under Government of Canada jurisdiction are excluded from the calculation of the fatality rates.

Between 2001 and 2005, the WCB accepted 75 fatalities in the Manufacturing, Processing and Packaging industries. The Primary Metal (especially Steel) Products sub-sector had the most with 37 fatalities, accounting for just under half of all fatalities in the Manufacturing, Processing and Packaging industries (see Table 4.1).

Table 4.1
Manufacturing, Processing and Packaging Occupational Fatalities Accepted by the WCB by Sub-Sector – Alberta: 2001-2005

Sub-Sector	2001	2002	2003	2004	2005	Total Number of Fatalities	Total %
Feed/Seed, Food and Beverage Products	0	1	1	1	1	4	5.3%
Foundries (not steel), Rubber and Non-metallic Products	1	0	2	2	2	7	9.3%
Gases, Fertilizer and Petrochemical Refining and Manufacturing	0	4	3	3	2	12	16.0%
Industrial Equipment	1	0	0	1	1	3	4.0%
Meat, Hides and Pelt Products	1	0	0	0	2	3	4.0%
Other Manufacturing, Processing and Packaging Industries	0	0	0	1	0	1	1.3%
Primary Metal (esp. steel) Products	11	4	6	8	8	37	49.3%
Printed and Published Products	0	1	0	0	0	1	1.3%
Wood Products	1	1	2	0	3	7	9.3%
Manufacturing, Processing and Packaging Industries	**15**	**11**	**14**	**16**	**19**	**75**	**100.0%**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

CERTIFICATE OF RECOGNITION EMPLOYERS

A Certificate of Recognition (COR) is given to employers who develop health and safety programs that meet established standards. Certificates are issued by Certifying Partners and are co-signed by AHRE[10].

In 2005, 4.5% of Manufacturing, Processing and Packaging industries' employers were COR holders. These employers represented 40.5% of the total person-years in the Manufacturing, Processing and Packaging industries. The Gases, Fertilizer and Petro-Chemical – Refining and Manufacturing sub-sector had the highest proportion of COR holders at 18.1%. Nearly two thirds of all person-years in the Wood Products sub-sector were from certified COR holders (see Table 5.0).

Table 5.0
Employers With Valid COR — Alberta: 2005

Sub-Sector	Number of Certified Employers	Total Number of Employers	% of Total Employers Certified	% of total Person-Years Certified
Manufacturing, Processing and Packaging Industries	**581**	**12,883**	**4.5%**	**40.5%**
Clothing and Textile Products	4	439	0.9%	5.3%
Feed/Seed, Food and Beverage Products	22	631	3.5%	29.1%
Foundries (not steel), Rubber and Non-metallic Products	38	321	11.8%	48.9%
Furniture and Allied Products	6	1,028	0.6%	9.9%
Gases, Fertilizer and Petrochemical Refining and Manufacturing	17	94	18.1%	55.6%
Industrial Equipment	40	432	9.3%	45.8%
Meat, Hides and Pelt Products	8	156	5.1%	53.5%
Plastic Products	11	149	7.4%	21.2%
Primary Metal (esp. steel) Products	326	7,097	4.6%	38.5%
Printed and Published Products	4	521	0.8%	6.0%
Wood Products	83	1,052	7.9%	63.3%
Other	22	963	2.3%	33.9%

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

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[10] For more information on the COR program visit http://www.hre.gov.ab.ca/cps/rde/xchg/hre/hs.xsl/277.html

Between 2004 and 2005, the lost-time claim rate for COR holders in the Manufacturing, Processing and Packaging industries increased from 2.4 to 2.8, while the rate for non-COR holders decreased from 4.0 to 3.9. For the province, there was a slight decrease in the lost-time claim rate for COR holders between 2004 and 2005, although when rounded, the rate remains unchanged at 2.4. Non-COR holders experienced a decrease from 2.6 to 2.4 in their lost-time claim rates (see Table 5.1).

Table 5.1

Lost-Time Claim Rate for Manufacturing COR Holders — Alberta: 2004 and 2005

Employer	Year	Manufacturing Industries				Province			
		LTCs	Person-Years	LTC Rate	Change in LTC Rate	LTCs	Person-Years	LTC Rate	Change in LTC Rate
COR	2004	1,770	73,895	2.4	14.9%	10,563	431,347	2.4	-3.0%
	2005	2,101	76,322	2.8		11,093	467,041	2.4	
Non-COR	2004	4,311	108,203	4.0	-2.3%	23,869	921,867	2.6	-6.2%
	2005	4,359	112,023	3.9		24,367	1,003,280	2.4	

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

APPENDIX A: TERMS, DEFINITIONS AND FORMULAS

Lost-Time Claim

A lost-time claim (LTC) is a claim for an occupational injury or disease that causes the worker to have time away from work, beyond the day of injury. Included are claims receiving reimbursement of full or partial lost wages due to occupational illness or injury, or payment for permanent loss of function.

Person-Years

Person-years are estimates calculated from wage and payroll data provided by account holders to the WCB. Alberta Human Resources and Employment uses data to estimate an average industry wage, and uses the average industry wage and employer payroll data to estimate person-years for each employer and each industry. One person-year is equivalent to one full-time worker working for one year, and can be assumed to equal 2,000 hours worked.

Lost-Time Claim Rate

The lost-time claim (LTC) rate is calculated by dividing the number of lost-time claims by the person-year estimate, and multiplying the result by 100. The LTC rate represents the probability or risk of an injury or disease to a worker during a period of one-year work, that will result in lost-time from work. Comparisons of LTC rates between industries, or between years, can be used to indicate increases, decreases, or differences in this risk.

$$\text{LTC Rate} = \frac{\text{Number of LTCs} \times 100}{\text{Person-Years}}$$

Duration (Days Lost)

The duration of disability is the number of days following the injury or disease for which the worker was disabled and unable to perform normal work duties. This information is obtained for this report from data on compensation days paid on each claim from the WCB. Alberta Human Resources and Employment obtains these data on March 31 of the year following the claim year, and does not update the information, even though many injured workers continue to be disabled beyond this date. As a result, the duration information reported here underestimates the true impact of lost-time injury and disease.

Duration Rate

The duration rate is calculated by dividing the number of workdays lost (disability days) by the person-year estimate, and multiplying by 100. The result is expressed as days lost per 100 person-years, and indicates, in part, the economic impact of occupational injury and disease. Duration rates are not recommended as reliable indicators of full economic cost. In addition, readers are warned that duration rates are highly unstable when based on only a few lost-time claims; it is recommended that the duration rate not be calculated based upon fewer than 30 lost-time claims.

$$\text{Duration Rate} = \frac{\text{Disability Days x 100}}{\text{Person-Years}}$$

Cost of Claims

Compensation cost of a claim is the reimbursement of full or partial lost wages that a worker received from the WCB due to occupational illness or injury.

WCB Accepted Fatality

An occupational fatality is the death of a worker which resulted from a work-related incident or exposure and which has been accepted by the WCB for compensation. A fatality is counted in the year it is accepted.

Fatality Rate

The fatality rate is calculated by dividing the number of accepted fatalities by the person-years estimate and multiplying the result by one million. The result is expressed as fatalities per million person-years. Fatalities that are found under the jurisdiction of the Government of Canada are excluded before the calculation of the fatality rate.

$$\text{Fatality Rate} = \frac{\text{Number of Fatalities x 1,000,000}}{\text{Person-Years}}$$

Number of Times Higher/Lower than the Provincial Average

The number of times higher/lower than the provincial average is used to compare the performance of the industries with the province regarding specific injury or disease. A number less than one indicates that the injury of the industries is lower than the provincial average; if equal to one it indicates the injury of the industries is the same as the provincial average and a number greater than one indicates that the injury of the industries is higher than the provincial average.

$$\frac{\text{Per cent of Total Claims for the Industries} \quad \text{x} \quad \text{Industries' LTC Rate}}{\text{Per cent of Total Claims for the Province} \quad \text{x} \quad \text{Provincial LTC Rate}}$$

Where:

Per cent of Total Claims for the Industries =

$$\frac{\text{Number of LTCs for the Industries (e.g. back injury)} \times 100}{\text{Total LTCs for the Industries}}$$

Per cent of Total Claims for the Province =

$$\frac{\text{Number of LTCs for the Province (e.g. back injury)} \times 100}{\text{Total LTCs for the Province}}$$

NEC	Means ‘Not Elsewhere Classified’.
UNS	Means ‘Unspecified’.

B

APPENDIX B: MANUFACTURING, PROCESSING AND PACKAGING WCB INDUSTRY CODES[11]

1. Meat, Hides and Pelt Products

01103 – Poultry Loading Services
10100 – Meat Processing
10104 – Rendering Plants
17200 – Tanneries

2. Clothing and Textile Products

17900 – Leather Goods – Manufacturing/Repair
21300 – Rope/Carpet – Manufacturing/Repair
22900 – Crests/Pennants – Manufacturing/Repair
22901 – Drapes/Linens – Manufacturing/Repair/Installation
24900 – Wearing Apparel – Manufacturing/Repair

3. Feed/Seed, Food and Beverage Products

02101 – Seed Cleaning Plants
02112 – Egg Grading
10500 – Dairy Products Processing
11202 – Fruit Juice Processing
12301 – Feed Mills
12400 – Flour Mills
12900 – Bakeries
13100 – Food Process – Miscelleneous
13101 – Candy Manufacturing
13300 – Beet Sugar Processing
13500 – Vegetable Oils/Yeast Manufacturing
13900 – Malt Manufacturing
13904 – Pasta Manufacturing
13905 – Vegetables Process/Grade
14100 – Soft Drinks/Water/Ice – Manufacturing
14300 – Liquor/Wine – Manufacturing
14500 – Breweries
37402 – Medicine/Vitamin Manufacturing

4. Wood Products

25100 – Saw Mills/Planing Mills
25401 – Wood Products – Manufacturing
25900 – Peel/Point – Posts
25901 – Treating of Timber

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[11] Codes are Workers' Compensation Board industry codes.

27102 – Pulp Mills
27103 – Panelboard – Manufacturing

5. Furniture and Allied Products

26101 – Upholstered Furniture – Manufacturing/Repair
26104 – Furniture Refinishing
42147 – Finishing Carpentry

6. Printed and Published Products

27402 – Envelope Manufacturing
28600 – Printing/Book Binding
28800 – Publish without Printing
28900 – Publish with Printing
86202 – Newspaper/Flyer Distribution
89301 – Electronic Print/Photofinishing

7. Foundries (not Steel), Rubber and Non-metallic Products

16901 – Tires/Rubber Products – Manufacturing
27200 – Asphalt Roofing Products – Manufacturing
29700 – Foundry – Non-ferrous
34100 – Pre-mixed Cement – Manufacturing
34500 – Gypsum Board – Manufacturing
34700 – Concrete Products – Manufacturing
34702 – Artificial Stone Products – Manufacturing
34800 – Transit Mix Operations
35200 – Clay Bricks – Manufacturing
35401 – Fibreglass Insulation – Manufacturing
38500 – Fibreglass Reinforced Products – Manufacturing

8. Primary Metal (esp. Steel) Products

26401 – Metal Furniture Manufacturing
29100 – Steel Manufacturing – exclude Foundries
29102 – Foundries, Iron and Steel
29200 – Steel Pipe Manufacturing
30100 – Steel/Metal Fabrication
30101 – Heat Treating/Stress Relieving
30403 – Metal/Porcelain Products – Coating
30407 – Pipe Cleaning/Coating
30412 – Sheet Metal Shops
30700 – Heat/Cooling Equipment Manufacturing
30801 – Machining
33602 – Switchboard/Electrical Panel – Manufacturing
33606 – Industrial Electric Equipment – Manufacturing
62500 – Steel Service Centre – No Salvage
62700 – Scrap/Salvage Dealers

89401 – Welding

9. Industrial Equipment

16902 – Industrial Belting – Install/Service
38100 – Instrumentation – Manufacturing
62304 – Compressors/Power Unit – Manufacturing

10. Gases, Fertilizer and Petrochemical – Refining and Manufacturing

36500 – Refine – Crude/Used Oil
37201 – Fertilizer Manufacturing/Nickel Refining
37801 – Petrochemicals – Manufacturing
37805 – Industrial Gases – Manufacturing

11. Plastic Products

37301 – Plastic Products – Manufacturing

12. Other Manufacturing, Processing and Packaging Industries

07900 – Peat Moss – Harvest/Process
12304 – Forage Processing
16900 – Rubber Stamps/Stencils – Manufacturing
17901 – Vinyl Goods – Manufacturing /Repair
22101 – Awnings/Tents/Tarps – Manufacturing /Repair
27300 – Cardboard Box/Tubing/Bag – Manufacturing
28603 – Signs/Advertising Displays – Manufacturing
29600 – Aluminum/Metal Extrusion
33500 – Phone Equipment – Manufacturing /Install
33900 – Light Fixtures – Manufacturing /Assembly
33902 – Electrical Components – Manufacturing
38200 – Jewelry – Manufacturing
38201 – Lapidary Services
39300 – Sporting Equipment/Brooms – Manufacturing
39701 – Outdoor Advertising
39901 – Picture Frame, Case, Casket – Manufacturing
69903 – Pottery – Manufacturing
86201 – Window/Store Display Ad Services
89916 – Taxidermists

CONTACT INFORMATION

For further information about the data presented in this report contact:

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Alberta Human Resources and Employment website:

http://www.hre.gov.ab.ca/cps/rde/xchg/hre/hs.xsl/563.html

Work Safe Alberta website:

http://www3.gov.ab.ca/hre/whs/worksafely/index.asp

Workplace Health and Safety Contact Centre:

Telephone: 780-415-8690, toll free by calling 1-866-415-8690

http://www.hre.gov.ab.ca/cps/rde/xchg/hre/hs.xsl/2874.html

Certificate of Recognition (COR) Program:

http://www.hre.gov.ab.ca/cps/rde/xchg/hre/hs.xsl/277.html

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